

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number
WO 2005/093293 A1

(51) International Patent Classification⁷: **F16H 55/14**,
57/00, F16D 3/52, F04C 29/00

(74) Agent: **BOOTH, Andrew, Steven**; The Boc Group Plc,
Chertsey Road, Windlesham, Surrey GU20 6HJ (GB).

(21) International Application Number:
PCT/GB2005/001087

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 22 March 2005 (22.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0406887.0 26 March 2004 (26.03.2004) GB

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **THE BOC GROUP PLC** [GB/GB]; Chertsey Road, Windlesham, Surrey GU20 6HJ (GB).

(72) Inventors; and

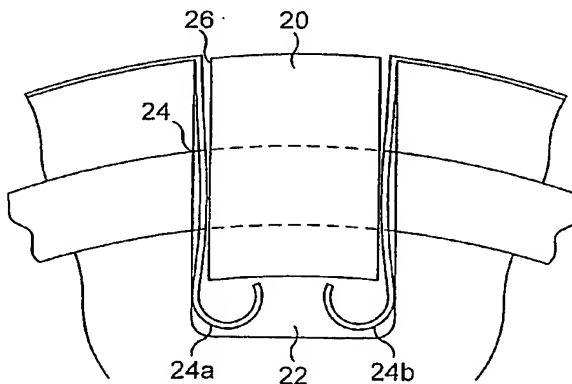
(75) Inventors/Applicants (*for US only*): **DAVENNE, Tristan, Richard, Ghislain** [GB/GB]; Boc Edwards, Unit 2, 23 Dolphin Road, Shoreham By Sea, West Sussex, BN43 6PB (GB). **SMITH, John, Cambridge** [GB/GB]; Northpoint, The Driftway, Upper Beeding, Steyning, West Sussex, BN44 3JX (GB).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GEAR ASSEMBLY



(57) Abstract: A gear assembly for transmitting torque from one shaft to another comprises two intermeshing gears mounted on respective shafts. One of the gears comprises a hub member for receiving one of the shafts, a toothed annular member mounted for rotation with the hub member. At least one spring provided between the hub member and the annular member has stiffness capable of reducing torsional vibrations and noise induced during rotation of the gears by the eccentricity of at least one of the gears.

WO 2005/093293 A1